REMARKS

This communication is a full and timely response to the Office Action dated July 1, 2009. Claims 1-12 are pending. By this communication, claims 1, 3, and 8 are amended and claims 11 and 12 are added. Support for the amended subject matter can be found, for example, at page 1, line 17 of the disclosure

Claims 1, 3, and 8 have been objected to because of alleged informalities. Applicants respectfully traverse this objection. However, in an effort to expedite prosecution these claims are amended to address the Examiner's concerns. Withdrawal of this objection is respectfully requested.

In numbered paragraph 10 on page 4 of the Office Action, claims 1-7 are rejected under 35 U.S.C. §101 for allegedly being directed to non-statutory subject matter. Applicants respectfully traverse this rejection.

When analyzing a claim for subject matter eligibility under 35 U.S.C. §101, two criteria must be satisfied. First, the claimed embodiment must be directed to one of the four statutory categories. Secondly, the claims must not be wholly directed to subject matter encompassing a judicially recognized exception. *See* Interim Patent Subject Matter Eligibility Examination Instructions, pg. 1, (August 24, 2009). The courts have established that a process is an act, or a series of acts or steps that are tied to a particular machine or apparatus **or** transform a particular article into a different state or thing.

Applicants' claim 1 recites the following:

> A method that validates a consistency of attributes of entities modeling a physical asset of a utility, said entities are stored in data sets of a multitude of different IT systems of the utility,
> wherein said entities are assigned to entity types, holding a list of available attributes,
> wherein a consistency service includes

an **input buffer** in which an entity to be validated for consistency of attributes of the entity can be placed,
output means in which the result of the consistency validation can be stored and
communication means to communicate with the different IT systems,
wherein an adapter for each of the IT systems allows communication between the consistency service and the IT systems, and
wherein a reference storage holds references to the entities in the data sets of the various IT systems such that a specific entity in a specific IT system can be addressed through the adapter of the specific IT system and based on such a reference stored in the reference storage,
said method comprising the following steps:
loading the entity to be validated for consistency of attributes of the entity **into the buffer of the consistency service**, wherein the physical asset carries the attributes of the entity,
reading, via the communication means, the values of the attributes of the entity **through the adapter** of an IT system,
comparing, in the consistency service, the values of the attributes of the entity to values of reference attributes stored in the consistency service, and
storing consistency validating information **in the output means**, said consistency validating information depending on the results of the comparison of the values of the attributes to the values of the reference attributes. (Emphasis Added)

On page 4 of the Office Action, the Examiner alleges that Applicants claims are directed to mental steps and are not tied to a particular machine. Applicants' disagree. From the listing of claim 1 above, one of ordinary skill would understand the method steps are carried out through the components of the consistency service. As provided in Applicants' disclosure, the consistency service includes an input buffer, output means, and communication means. The combination of these features establishes the consistency service as a machine.

The Examiner alleges that Applicants' claims are not statutory because they are allegedly not tied to a particular machine and do not perform a transformation. *See* Office Action, pg. 5. This analysis, however, is inconsistent with the examination guidelines.

From the remarks in the Office Action, the Examiner appears to acknowledge that Applicants' claims fall within one of the four patent-eligible subject matter categories. *See* Id., numbered pgph 10, pp. 4-5. As noted above, a process has been judicially defined as a process is an act, or a series of acts or steps that are tied to a particular machine or apparatus **or** transform a particular article into a different state or thing. Applicants' claimed loading, reading, comparing, and storing features are all recited in the context of the consistency service. Because in Applicants' disclosure the consistency service is described as a machine, Applicants' refute the Examiner's position that the claimed process steps are not tied to a machine and can be entirely implemented in the human mind. In the listing of claim 1 above, Applicants' have emphasized the language in claim 1 that "ties" the steps to a component of the consistency service.

Based on the above, Applicants' submit that claim 1 recites a method that is statutory under 35 U.S.C. §101. Therefore, withdrawal of this rejection is respectfully requested.

In numbered paragraph 11 on page 5 of the Office Action, claims 8-10 stand rejected under 35 U.S.C. §101 for allegedly being directed to non-statutory subject matter. Applicants respectfully traverse this rejection.

In numbered paragraph 11, on page 5 of the Office Action the Examiner seemingly alleges that because the claimed input buffer is interpreted as a file or software application that stores data, the entire claim is directed to software per se. Applicants disagree.

Even assuming *arguendo* that the Examiner's interpretation of the claimed "input buffer" is reasonable, the combination of features when viewed in their entirety cannot reasonably be interpreted as being directed to software per se.

Independent claim 8 recites the following:

> A system that validates a consistency of attributes of entities modeling a physical asset of a utility, which entities are stored in data sets of a multitude of different IT systems of the utility and which entities are assigned to entity types holding a list of available attributes, said system comprising:
> **a consistency service** having:
> an **input buffer** in which an entity to be validated for consistency of attributes of the entity can be placed, wherein the physical asset carries the attributes of the entity;
> **output means** for storing a result of the consistency validation; and
> **communication means** for communicating with the different IT systems,
> wherein an adapter for each of the IT systems allows communication between the consistency service and the IT systems, and
> wherein **a reference storage** holds references to the entities in the data sets of the various IT systems such that a specific entity in a specific IT system can be addressed through the adapter of the specific IT system and based on such a reference stored in the reference storage,
> wherein the consistency service comprises **means for comparing** the values of the attributes of a specific entity to values of reference attributes stored in the consistency service, and
> wherein the output means stores the consistency validating information depending on the results of the comparison of the values of the attributes to the values of the reference attributes. (Emphasis Added).

Based on the aforementioned features, one of ordinary skill would understand that Applicants' claim is, in fact, directed to a machine.

Claim 8 recites communication means for communicating with different IT systems and means for comparing the values of the attributes of a specific entity to values of reference attributes stored in the consistency service. Even if these features could reasonably be interpreted as being designed in software, one of ordinary skill would understand that for implementation they must be executed by a processor or other computing device. The disclosure of the structure (or material or

acts) may be implicit or inherent in the specification if it would have been clear to those skilled in the art what structure (or material or acts) corresponds to the means (or step)-plus-function claim limitation. See *Id.* at 1380, 53 USPQ2d at 1229; *In re Dossel*, 115 F.3d 942, 946-47, 42 USPQ2d 1881, 1885 (Fed. Cir. 1997). *See* MPEP §2181, Eighth Edition, August 2001, Rev. July 2008. Based on the above and on current patent practice, a reasonable analysis of claim 8 would find that the features of this claim are directed to statutory subject matter. Accordingly, withdrawal of this rejection is respectfully requested.

In numbered paragraph 13 on page 6 of the Office Action, claims 1 and 3-9 are rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Tindal et al* (U.S. Patent Publication No. 2002/0069274) in view of *Stallings* ("SNMP and SNMPv2: The Infrastructure for Network Management") and further in view of *Shorter et al.* (U.S. Patent Publication No. 20030004822). Applicants respectfully traverse this rejection.

The Examiner alleges that the combination of *Tindal* and *Stallings* discloses every feature recited in Applicants' claims except a reference storage that holds references to the entities in the data sets of the various IT systems such that a specific entity in a specific IT system can be addressed through the adapter of specific IT system and based on such a reference stored in the reference storage, as recited in the claims.

Shorter discloses a peer-to-peer multi channel retailing system, in which common data such as customer identification data is shared between the different channels. The data can be created or modified at any channel, that is, the data is

replicated across multiple retail IT systems. *See* <u>Shorter</u>, pgph [0013]. As a result, internal tables can indicate the location of other retail channels. <u>Id</u>., pgph [0027].

However, given the very nature of the "personal" data considered, e.g., customer identification and preferences or sales transaction data, data consistency cannot be an issue, as the latest data is always assumed to represent the correct status or will of the customer. This personal data is far different than data that relates to physical assets as recited in the claims. The physical asset data has an attribute that may only have one single objective value that has to be carefully selected in case of contradictions or inconsistencies.

The adapters as described in *Shorter* intercept messages generated in the corresponding retail IT systems. In other words, to learn about modified data, the adapter of *Shorter* relies on corresponding messages being exchanged within the retail IT system. Hence there is no need to indicate to the adapters a permanent reference to an entity of a specific IT system, which reference would provide the capability to address the entity from outside of the retail IT system (through the adapter). The embodiments as recited in Applicants' claims embody the latter features, where a separate consistency service can address the specific entity within the IT system through the adapter and for attribute consistency validation.

In summary, *Tindal*, *Stallings*, and *Shorter* when applied individually or collectively fail to disclose a multitude of IT systems (e.g., SCADA, CMMS, GIS) that refer to a single physical asset or component of a utility as recited in the subject claims. These systems also having the capability to assign different (and conflicting) values to an attribute of the various entities representing the asset. As a result of

these deficiencies, it follows that these reference also do not contemplate that the centrally stored reference information about the entities in the various IT systems.

In numbered paragraph 14 on page 13 of the Office Action, claims 2 and 10 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Tindal et al* and *Stallings* and *Shorter et al* and further in view of *Menezes A J et al* ("Hash functions and data integrity" Handbook of applied cryptography). Applicants respectfully traverse this rejection.

Because claims 2 and 10 variously depend from independent claims 1 and 8, respectively, Applicants respectfully submit that these claims are allowable for at least the same reasons discussed above with regard to their respective base claim. In addition, these claims are further distinguishable over the applied references by virtue of the additional features recited therein. Thus, because *Menezes* fails to remedy the deficiencies of *Tindal* and *Stallings* with regard to the combination of features recited in independent claims 1 and 8, Applicants respectfully submit that a *prima facie* case of obviousness has not been established. Withdrawal of this rejection is respectfully requested.

Newly added claims 11 and 12 depend from claims 1 and 8, respectively. Applicants respectfully submit that these claims are allowable for at least the same reasons discussed above, and are further distinguishable over the applied references because of the additional features recited therein. Favorable consideration of claims 11 and 12, therefore, is respectfully requested.

Conclusion

Based on the foregoing amendments and remarks, Applicants respectfully submit that claims 1-12 are allowable and this application is in condition for allowance. In the event any unresolved issues remain, the Examiner is encouraged to contact Applicants' representative identified below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: October 1, 2009   By: /Shawn B. Cage/
                                     Shawn B. Cage
                                     Registration No. 51522

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620